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EXAMINER	
MACARTHUR, VICTOR L	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/636,034	HARDER, WILLARD J.	
	Examiner	Art Unit	
	Victor MacArthur	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 6-13 and 17-39* is/are rejected.

7)☒ Claim(s) *3-6 and 14-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/18/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 1-39 are objected to because of the following informalities:

- The claims are generally narrative, failing to conform to current U.S. practice. They are replete with grammatical and idiomatic errors (i.e., improper antecedent basis, spelling, double inclusion). For instance the limitation "said tubes having an inside wall" (line 1 of claim 7) should be removed since the limitation "inside wall" is previously set forth in claim 1. The claims should be completely rewritten to improve claim clarity.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6-13, 17-24, 27, 29-31, and 36-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Roth U.S. Patent 1772159.

Claim 1. Roth discloses (figs.1-6) a railing comprising: upright laterally spaced upright posts (p.1, ll.1-5), a top rail (9) extended between and connected to the posts (p.1, ll.1-5), a bottom rail (8) located below the top rail and extended between and connected to the posts, a

plurality of laterally spaced upright spindles (7, 22) extended between the top and bottom rails, first ball knobs (top 23), first fasteners (top 13) attaching the first ball knobs to the top rail, second ball knobs (bottom 23), second fasteners (bottom 13) attaching the second ball knobs to the bottom rail in general vertical alignment with the first ball knobs, the spindles having opposite ends (top and bottom ends of 7) with inside walls (inside walls of 22) located in telescopic relation (in as much as the applicant's invention is telescopic) with the first and second ball knobs thereby anchoring the spindles on the rails.

Claim 2. Roth discloses a first spacer (top 10 as described in p.1, ll.55-57) located between the first ball knobs and the first rail, the first fasteners retaining the first spacer in engagement with the first rail and connecting the first ball knobs to the first rail, and a second spacer (bottom 10 as described in p.1, ll.55-57) located between the second ball knobs and the second rail, the second fasteners retaining the second spacers in engagement with the second rail and connecting the second ball knobs to the second rail.

Claim 6. Roth discloses that the spindles are linear tubes having open opposite ends telescoped in tight fit engagement around the first and second ball knobs (as seen in fig.5).

Claim 7. Roth discloses that the inside wall (inside wall of 22) has inwardly directed projections (14a) engageable with the first and second ball knobs to inhibit rotation of the spindles relative to the first and second knobs.

Claim 8. Roth discloses that each of the first and second ball knobs have a spherical body having an annular convex side wall located in a tight frictional contact with an inside wall of the spindle (as seen in fig.5).

Claim 9. Roth discloses that the convex sidewall includes a plurality of spaced circumferential outwardly extended continuous ribs (portions of 23a above and below 14a, as seen in fig.6) located in bias contact with the inside wall of the spindle.

Claim 10. Roth discloses that each of the first and second ball knobs have outwardly extended ribs (portions of 23a above and below 14a, as seen in fig.6) located in tight friction contact with an inside wall of the spindle.

Claim 11. Roth discloses that the spindles are linear tubes, the inside wall having inwardly directed projections (14a), and the first and second knobs having circumferential outwardly directed ribs (portions of 23a above and below 14a, as seen in fig.6), the projections being engageable with the ribs to inhibit rotations of the spindles relative to the first and second knobs.

Claim 12. Roth discloses a railing comprising: a top rail (9), a bottom rail (8) located below the top rail, a plurality of laterally spaced upright spindles (7, 22) extending between the top and bottom rails, first ball knobs (top 23), first fasteners (top 13) attaching the first ball knobs to the top rail, second ball knobs (bottom 23), second fasteners (bottom 13) attaching the second ball knobs to the bottom rail in general vertical alignment with the first ball knobs, the spindles having opposite ends (top and bottom) with inside walls (inside walls of 22) located in telescopic relation (in as much as the applicant's invention is) with the first and second ball knobs thereby anchoring the spindles on the rails.

Claim 13. Roth discloses a first spacer (top 10) located between the first ball knobs and the first rail the first fasteners retaining the first spacer in engagement with the first rail and connecting the first ball knobs to the first rail, and a second spacer (bottom 10) located between

the second ball knobs and the second rail the second fasteners retaining the second spacers in engagement with the second rail and connecting the second ball knob to the second rail.

Claim 17. See rejection of claim 6 above.

Claim 18. See rejection of claim 7 above.

Claim 19. See rejection of claim 8 above.

Claim 20. See rejection of claim 9 above.

Claim 21. See rejection of claim 10 above.

Claim 22. See rejection of claim 11 above.

Claim 23. Roth discloses (figs. 1-6) a tube (22) having an open and inside cylindrical wall (inside wall of 22), and a ball knob (top 23) adapted to be secured to a support (9), the open end of the tube being telescoped around in tight fit relationships with the ball knob.

Claim 24. Roth discloses that the ball knob includes a spherical body having a top surface (top surface of 23), a bottom surface (bottom surface of 23), and an annular convex curved side wall (side of 23) located in engagement with the inside cylindrical wall of the tubes and a hole (receiving 13) in the body extended between the top and bottom surfaces for accommodating a fastener (13) to secure the knob to the support.

Claim 27. Roth discloses at least one outwardly directed annular rib (portions of 23a above and below 14a) on the convex curved sidewall of the body.

Claim 29. Roth discloses that the ball knob has an annular convex sidewall (sidewall of 23a), a top surface (top surface of 23a) and a plurality of spaced circumferential outwardly extended continuous ribs (portions of 23a above and below 14a) on the convex curved sidewall of the ball knob.

Claim 30. Roth discloses that the annular convex curved sidewall has an outwardly curved annular shape extended downwardly form the top surface of the ball knob (as seen in fig.6).

Claim 31. Roth discloses a ball knob for anchoring a tube to a support comprising: a spherical body (23a) having a top surface (top surface of 23a), a bottom surface (bottom surface of 23a), and an annular convex curved sidewall (sidewall of 23a), and a hole in the body (hole within 23a) extended between the top and bottom surfaces for accommodating a fastener to secure the knob to a support.

Claim 36. Roth discloses at least one outwardly directed annular rib (portions of 23a above and below 14a) on the convex curved sidewall of the body.

Claim 37. Roth discloses a plurality of spaced circumferential outwardly extended continuous ribs (portions of 23a above and below 14a) on the convex curved sidewall of the body.

Claim 38. Roth discloses that the annular convex curved sidewall has an outwardly curved annular shape extended downwardly form the top surface of the body (as seen in fig.6).

Claim 39. Roth discloses a plurality of spaced circumferential outwardly extended continuous ribs (portions of 23a above and below 14a) on the convex curved sidewall of the body and the sidewall having an outwardly curved annular shape (as seen in fig.6) between the top surface of the body and the ribs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth U.S. Patent 1772159 in view of Hannum U.S. Patent 4645598.

Claims 25 and 32. Roth discloses that the body is a one-piece member but is silent regarding the material of the body. However, the cross-hatching in the figures illustrates metal see MPEP §608.02. Hannum teaches (col.2, ll.3-7) that it is beneficial to replace metal parts with plastic because they are non-corrosive, energy efficient, light weight, less costly to install or repair, and have proven to be superior in wear and performance. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to make the Roth body from plastic, as taught by Hannum, for the purpose of reducing weight and cost while improving performance.

Claims 26, 28, 33, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth U.S. Patent 1772159.

Claims 26, 28, 33, 34 and 35. Figures 5 and 6 of Roth disclose that the body is a spherical member (figs. 5 and 6). Figure 4 of Roth shows the body as being truncated at the top and bottom such that the top surface is a flat circular surface and the bottom surface of the body is a flat circular surface. It has generally been recognized that a change in the shape of a prior art

device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the shape of spherical body of figures 5 and 6 to be truncated at the top and bottom, as shown in figure 4, since such practice is a design consideration within the skill of the art and no new and unexpected results are produced.

Allowable Subject Matter

Claims 3-5, and 14-16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3, 5, 14 and 16. Roth does not disclose that the spacers are plates that are generally circular disks. Fricano U.S. Patent 5169210 shows (fig.8 and col.3, ll.42-52) spacers (35) that are plates that are generally circular disks beneficial for facilitating pivoting between members while providing sufficient friction for stable positioning of members. However, one of ordinary skill in the art would not be motivated the replace the Roth spacers with the Fricano plates since there is no pivoting present between the Roth spindle and rail to facilitate. Claims 4 and 15 depend from claims 3 and 14 and as such are similarly objected to.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VLM
April 28, 2004

Daniel P Stodola

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